side of scape of antennæ which are bright orange (almost red in life); thickly clothed with black hair, which are erect and especially so on the anterior part of the elytra; the elytra bear also, a little in front of the middle, a vague broad transverse band composed of recumbent cinereous hairs and less conspicuous clouds of same at apex and base. Head and thorax confluently punctate, elytra less deeply punctate but more nearly tuberculate in sculpture and vaguely subcostate near suture. Body beneath and legs similarly roughly sculptured. Abdomen feebly punctate and more shining. Eyes large, finely granulate, emarginate for insertion of antennæ. Thorax constricted at the sides, disc deeply impressed in front of the middle; the impression, which is of uniform depth and slightly arcuate posteriorly, reaches from side to side, connecting the constrictions of the side margin, behind the impression the thorax is rounded and convex. Length, 10 mm. = .40 inch; width, 3.8 mm. = .15 inch.

One specimen, taken on summit of Screamer Mt., Rabun Co., Ga., June 15, 1909; elevation, 3,500 feet.

This species closely resembles *C. sphegeus* in size, form and sculpture but differs in color, maculation and form of thorax which in *sphegeus* is much flattened behind the impression. The orange color of the hind femora is also a most conspicuous difference. I take pleasure in naming this insect for my friend, Louis H. Joutel, in recognition of his studies in the Cleridæ.

SOME NEW AND LITTLE-KNOWN COCCIDÆ.

By T. D. A. COCKERELL AND W. W. ROBBINS,
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Aspidiotus arctostaphyli, new species.

Scale of female: 1–2.2 mm. in diameter, subcircular, moderately convex, pale reddish gray in color. Exuviæ pale orange color.

FIG. 1. *Aspidiotus arctostaphyli*, new species.

Adult female: .85–1 mm. long, .5–.7 mm. wide at widest part. Pale yellowish orange in color. Entire body translucent except anal plate. Anal plate slightly chitinized. Two pairs of median lobes; third and fourth pairs represented by mere projections. Median lobes slightly oblique; broadly rounded apically with notch on inner and outer margins; the outer one more distinct. Small chitinous thickenings present on inner side of median lobes; thickenings of first interlobar incision feeble. Second lobes very broad, feebly crenulated. Spines distinct; one at base of median and second lobes, another just beyond last projection and a fourth far beyond last projection. In the depressions between the median lobes, between the median and second lobes and beyond the second lobes are large plates with a number of teeth. The plates between the median lobes and between

the median and second lobes are narrower than those beyond second lobe. The number of teeth is variable. Anal opening oval, .05 mm. from tip of median lobe. Paragenitals in five groups; caudolaterals 3–4; cephalo-laterals 7; median 4. Dorsal pores prominent and very numerous. Longitudinal thickenings enclosing the vaginal opening; this opening about .1 mm. from the tip of median lobes.

Male: Length (exclusive of caudal stylus) .57 mm.; caudal stylus .34 mm.; breadth of thorax .34 mm.; color yellowish brown, the abdomen and tip pallid; probably yellower in tip. Compared with other *Aspidiotus* males, it is remarkable for the very robust thorax, which, as mounted in balsam, shows a median pale line, and imperfect lateral ones.

Very closely allied to *A. densifloræ* Bremner, but distinguished by the color of the scales and the broad second lobes. *A. densifloræ* is described as having the median group of circumgenital glands one or none.

On leaves of *Arctostaphylos viscida* Parry, Red Bluff, Tehama Co., Cal. Coll. Elizabeth Hermann. Received from Prof. C. F. Baker.

Aspidiotus perniciosus Comstock.

On Ben Davis apples, Grand Junction, Colorado (O. B. Whipple com. C. P. Gillette). New to Colorado.

Pseudoparlatoria ostreata Cockerell.

On *Carica papaya*, Santiago de las Vegas, Cuba (C. F. Baker). New to Cuba. Prof. Baker also collected at Santiago de las Vegas *Pælococcus rosæ* (Riley & Howard), on *Bursera gummifera* and *Parlatoria pergandii* Comstock, on orange.

Pseudococcus juniperi (Ehrhorn).

On *Sabina monosperma*, Cañon City, Colorado (E. Bethel). Not quite typical, but evidently this species. New to Colorado. At Cañon City Mr. Bethel also collected *Ceroputo calcitectus* (Cockerell) on *Agropyron;* another addition to the Colorado fauna.

Chionaspis sassceri, new species.

Scale of female: 1.5 mm. long, expanding posteriorly, somewhat curved; secretion ashy gray, smooth, not dense; ventral scale present.

Adult female: Length .5 to .8 mm., breadth at widest point about one half length. Body after boiling in KHO hyaline; anal plate broader than long. Median lobes touching at base and widely spreading toward tip; in some specimens, however, the median lobes are more or less parallel; tips of median lobes rounded; inner lobe of first lateral pair less than one half width of median lobe; outer lobe of first lateral pair very short and much smaller; second pair of laterals represented by an inner and outer lobe, the latter being small and indistinct. No median spine-like plates; others 1, 2, 2, 2, 5–6. Spines rather large. Anal opening about one fifth of length of body from base; about diameter of the median lobe. Paragenitals 13, 24–

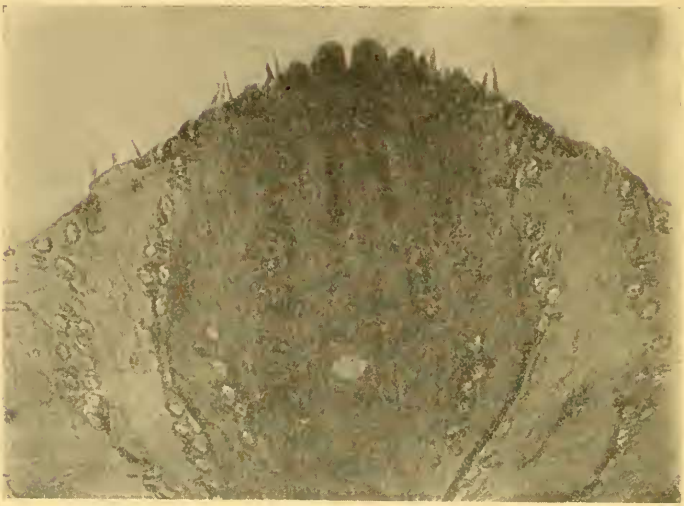

FIG. 2. *Chionaspis sasseri*, new species.

FIG. 3. *Chionaspis micropori*, Marlatt.

25, 16–22. Dorsal pores elongated and much larger than paragenitals; inner row 7; second row in two groups of 9 and 7; third row in three groups of 13, 4 and 3; fourth row in two groups of 11 and 5; fifth row consisting of one group of 9. Pygidium slightly chitinized.

Type. — University of Colorado. Collected on orange, at Fallbrook, California, by F. Austin. (Comm. Prof. C. F. Baker.)

The scales occur upon the bark in large numbers, and must be highly injurious. We had at first identified this species with *C. micropori* Marlatt, but after some correspondence with Mr. E. R. Sasscer we must follow his opinion, expressed on first seeing specimens, that it is distinct. The resemblance is certainly very close, but our insect has much larger dorsal pores, and the texture and size of the scale are different, that of *C. micropori* being very dense and chalky white. The second lateral lobe of *micropori*, as in our insect, seems to be normal, with a distinct outer lobule, notwithstanding the statement to the contrary in the original description. We are indebted to the kindness of Mr. Sasscer and Dr. Marlatt for specimens of *C. micropori*, and to Mrs. Sasscer for photographs of both species.

OBSERVATIONS ON TWO SPECIES OF HYALOPTERUS (APHIDIDÆ).*

BY PAUL HAYHURST,

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(WITH PLATE I.)

The only species of *Hyalopterus* Koch hitherto recognized by American writers is, so far as I know, *H. arundinis* Fabr. (*H. pruni* Fabr.). This is the well-known greenish, pulverulent aphid of an elongated form, with extremely small cornicles, which infests the under side of the leaves of plum trees. An account is here given of two other species which I believe have not been noticed before in the United States. *Hyalopterus aquilegiæ-flavus* (Kittel) which infests the columbine and rose in Europe, was found on these plants on the grounds of the Bussey Institution last fall. *H. dactylidis* n. sp. is an elongated yellowish aphid which I have taken on orchard grass, *Dactylis glomerata*, in the District of Columbia and at Forest Hills, Mass.

The winged and wingless viviparæ of *Hyalopterus aquilegiæ-flavus*

* Contributions from the Entomological Laboratory of the Bussey Institution, Harvard University, No. 6.